

How to Apply

Applications are due on or before
December 1, 2016

Undergraduate and graduate students in computer science, engineering, and information technology related majors are encouraged to apply. Must be a U.S. Citizen.

- Submit a current resume
- Official university transcript (with Spring courses posted and/or a copy of Spring 2017 schedule)
- Undergraduate 3.0 GPA minimum
- Graduate 3.2 GPA minimum
- One letter of recommendation from a faculty member
- Letter of intent confirming U.S. Citizenship and stating strengths, goals, and interests and how a CSCNSI appointment will help you achieve your goals

Send all application materials to:

Information Science & Technology Institute
Los Alamos National Laboratory
Mail Stop T011
Los Alamos, NM 87545

or

Email: apply-cscnsi@lanl.gov
Fax: (505) 663-5504

Questions? apply-cscnsi@lanl.gov

Students will be notified of selection by mid
December 2016.



New Mexico Consortium and
Los Alamos National Laboratory

2017 Computer System, Cluster, and Networking Summer Institute

June 5 - August 11

A National Science Foundation-sponsored
undergraduate summer institute



The Powerwall brings the latest in 3D simulations from LANL's cluster computers to life, allowing scientists immersive interaction with their research.

Purpose

The Computer System, Cluster, and Networking Summer Institute (CSCNSI) is a focused technical enrichment program for students currently engaged in computer science, computer engineering, or similar major. The primary objective of the CSCNSI is to provide a thorough introduction to the techniques and practices of cluster computing. The program includes lecture, laboratory, and professional development components. Students explore current challenges in high performance computing (HPC) through the inclusion of an extensive seminar series consisting of seminars given by practitioners and



researchers actively engaged in HPC-related topical areas. At its core, the CSCNSI is an intensive project-driven technical summer program during which small student teams actively build computer clusters and then execute real-world, HPC-related research projects under the advisement of an assigned mentor or mentor team. The CSCNSI is also an innovative, proactive approach to making the students aware of career possibilities within the Laboratory. The CSCNSI is executed as a paid ten-week research internship.

"There is no other place where you can gain this amount of knowledge in a summer on top of making connections with intelligent people that are enthusiastic about us and their research." — 2014 Student

Description

Practical Skill Development

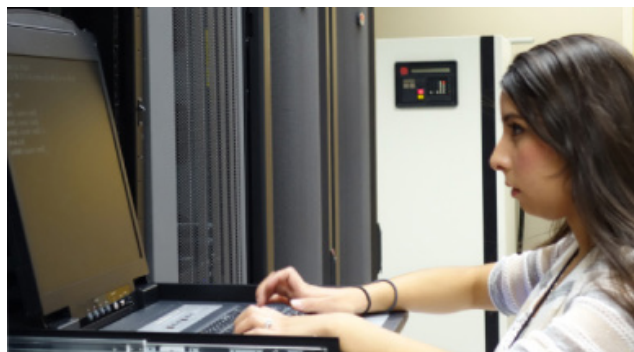
The CSCNSI is designed to provide students with hands-on experience in setting up, configuring, administering, testing, monitoring, and scheduling of computer systems, supercomputer clusters, and computer networks.

Technical Broadening

The CSCNSI exposes students to a variety of key HPC-related topics, technologies, and problems of interest through execution of a technical research project, as well as participation in tutorials, seminars, and facility tours, including a full facilities and machine room tour of the Metropolis Supercomputing Center at LANL.

Professional Development

The CSCNSI provides students with a targeted set of professional development opportunities, including teaming and written and oral communication skill development through a series of workshops and training sessions and assignments, including resume writing, technical project execution, technical poster development, and technical presentation development and coaching.



Student testing QDR Infiniband hardware.

Earn College Credit

Up to 3 hours of computer science college credit may be available for successful completion of the CSCNSI program through a special collaboration with New Mexico Tech (www.nmt.edu).

Students

This highly-selective program is designed for third year (i.e., Junior) and above undergraduate and graduate students, although in some cases, Sophomore applicants may be considered. Acceptance into the program will be based on academic record (3.0 GPA minimum), interest and goal statement, and a letter of recommendation.

As a general guideline, students should have experience with the LINUX operating system and sufficient academic achievement to make them eligible graduate school candidates upon completion of their undergraduate program. Computing and information technology students will be considered. This program is limited to U.S. citizens.

Duration and Location

The CSCNSI is executed as a paid ten-week research internship, June 5 through August 11, and will be held at the Los Alamos Research Park in Los Alamos, NM.



Los Alamos Research Park.

Faculty

A New Mexico Consortium instructor will conduct lectures and supervise machine room activities. In addition, Laboratory staff will provide guest lectures on a diverse set of research topics, as well as technical mentor projects.

"10/10 would recommend. Great environment, amazing people, research that matters, and New Mexico is pretty awesome. Lots of cool hiking, running, biking, and exploring to do outside of work." — 2015 Student